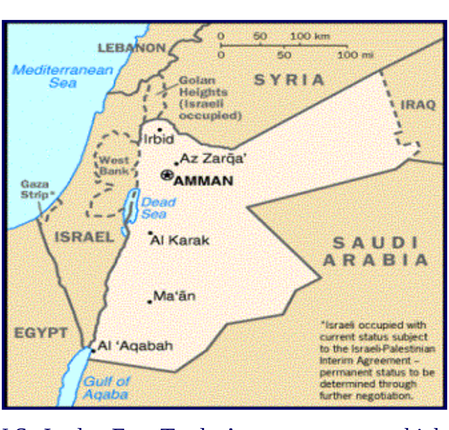
March 2003

Background | Oil | Natural Gas | Electricity | Profile | Links

Jordan

Jordan occupies a strategic location in the Middle East, and is an important crossroads for regional energy integration. Jordan also is a potential alternative transit center for oil and gas exports from the Persian Gulf region.

Note: information contained in this report is the best available as of March 2003 and can change.



GENERAL BACKGROUND

Despite tensions in the Middle East, Jordan's economy has been experiencing growth. Real gross domestic product (GDP) grew at 4.9% in 2002, but is projected to drop back to 3.5% in 2003. Much of the recent growth stems from expansion in the country's manufacturing sector. This has been driven in part by the U.S.-Jordan Free Trade Area agreement, which was ratified by the U.S. Senate in September 2001.

Exports of goods to neighbors Iraq and Saudi Arabia also are important to Jordan's economy, and growth in regional exports is helping to further Jordan's economic recovery. Remittances from Jordanian workers in the Persian Gulf countries also are very important to Jordan's balance of payments.

Jordan was admitted to membership in the World Trade Organization in April 2000, after agreeing to a package of trade and investment liberalization measures, as well as improvement in protections for foreign-owned intellectual property.

A privatization program has been undertaken to reduce the Jordanian government's stake in sectors of the economy previously dominated by state-controlled firms. The Jordanian government sold a 40% stake in the Jordan Telecommunications Company to France Telecom in 2000, in the most significant privatization to date. Oil and electric power generation also are targeted for privatization, but progress in the energy sector has been relatively slow. As part of its preparations for admission to the WTO, Jordan in 2000 lifted most limits on foreign ownership of formerly state-owned companies.

OIL

Jordan has no significant oil resources of its own, and relies on Iraqi oil for nearly all of its needs (around 106,000 barrels per day -- bbl/d -- in 2002). Jordan's oil imports from Iraq are permitted by the United Nations under a special dispensation from the general U.N. sanctions regime on Iraq.

In December 2002, Jordan's government renewed its agreement with Iraq on oil supplies. Under the agreement, Jordan receives half of its crude oil free of charge, and receives steeply discounted prices for the rest. In addition to the crude oil imports, Jordan also imports about 20,000 bbl/d of refined petroleum products from Iraq, also priced at a substantial discount. Jordan has reportedly held discussions with potential alternate suppliers in the Persian Gulf about replacement of Iraqi oil supplies if they were were disrupted, but has stressed that no final agreements for such supplies have been reached. Another measure taken is the acquisition of an oil tanker, with a capacity of 2 million barrels, which is berthed at the port of Aqaba. It has been used to build up a strategic reserve, and has reportedly now been filled to capacity.

Jordan has one refinery, at Zarqa, with a capacity of 90,400 bbl/d. An expansion of the facility to a capacity of 150,000 bbl/d is under consideration, but has not yet been implemented. Jordan and Iraq had agreed in 1998 to build a pipeline for the transport of Iraqi oil to Jordan's Zarqa refinery, and renewed this commitment in their most recent oil supply agreement. This would eliminate the necessity of transporting oil over 600 miles of highway from Iraq with a fleet of 1,500 tanker trucks. The Jordanian government received bids on the project in late 2002. However, it seems doubtful that the project will move forward in the near future.

Jordan does possess a significant quantity of oil shale resources, possibly as much as 40 billion tons. Canada's Suncor has conducted limited exploration digging in the Lajjun area, southwest of Amman, and has conducted discussions with the Jordanian government on the possible development of an oil shale extraction facility, but no development agreement has been signed.

Jordan's state Natural Resources Authority (NRA) has been promoting oil exploration within the country, which has been relatively unexplored until now. TransGlobal Corporation holds a concession for the Wadi Araba area in Western Jordan. Other small independent companies have conducted surveys of other areas as well, but without yet finding commercial quantities of oil. To help attract foreign investment, the Jordanian government has plans to privatize its oil sector. In October 1995, the country set up the state-owned National Petroleum Co. (NPC) to handle upstream oil and gas exploration and development. In mid-1999, NPC divested its oil-drilling operation, which now operates as Petra Drilling Company. NPC is still active in the natural gas sector.

Oil Transportation

A comprehensive settlement of the Arab-Israeli conflict could affect Middle East oil flows significantly. Jordan's geographic location between the Arabian peninsula and the Mediterranean coastal states of Israel and Lebanon offers the potential for alternative oil export routes for Persian Gulf oil to the West. At present, these oil exports must travel either by ship (through the Strait of Hormuz), by pipeline from Iraq to Turkey (capacity 0.8-1.6 million bbl/d), or via the Sumed (Suez-Mediterranean) Pipeline (capacity 2.4 million bbl/d).

Utilization of the Trans-Arabian Pipeline (Tapline) could offer another potentially economic alternative. The Tapline was originally constructed in the 1940s with a capacity of 500,000 bbl/d, and intended as the main means of exporting Saudi oil to the West (via Jordan to the port of Haifa, then part of Palestine, now a major Israeli port city). Following the establishment of the state of Israel, the Tapline's terminal was diverted from Haifa to Sidon, Lebanon (through Syria and Lebanon).

Partly as a result of turmoil in Lebanon, and partly for economic reasons, oil exports via the Tapline were halted in 1975. In 1983, the Tapline's Lebanese section was closed altogether. Afterwards, the Tapline was used exclusively to supply oil to Jordan, from 1983 until Saudi Arabia terminated this arrangement in 1990 after the Iraqi invasion of Kuwait. With the future of Iraqi oil supplies to Jordan open to question, the Tapline has once again begun to attract attention as a potential alternate source of oil for the country. According to press reports, Saudi Arabia has quietly started examining the condition of the pipeline and the feasibility of returning it to operation if necessary, but given the condition of the pipeline, that could not be done quickly.

NATURAL GAS

Jordan has modest reserves of natural gas, 230 billion cubic feet (Bcf), and has developed one gas field, at Risha in the eastern desert near Iraq. The current output of around 30 million cubic feet per day (Mmcf/d) from the Risha field is used to fuel one nearby power plant, which generates about 10% of Jordan's electricity.

For several years, Jordan has been exploring the option of importing natural gas from Egypt. In 1999, a decision was made to delay imports until a more thorough evaluation of reserves at the Risha field was completed. When this review showed that quantities available were not sufficient to meet the country's needs, Jordan decided to reopen talks on imports from Egypt. In May 2001, a 30-year agreement was concluded with Egypt for gas sales to begin at a rate of 100 MMcf/d in 2003. Construction of the section of the pipeline in Egypt began in late 2001, starting from the existing pipeline terminus at El-Arish in Sinai. The Egyptian state-owned firm EGAS was awarded a contract by the government of Jordan in August 2002 for the construction of the Jordanian section of the pipeline, from Aqaba to power plants near Amman. Most of the construction work is complete, and the pipeline is slated to begin operation in May 2003.

Arab governments also have been discussing the potential of extending the Egypt-Jordan pipeline and increasing its capacity - dubbed the Arab Gas Pipeline project. The extensions under discussion have included a link to Syria and Lebanon, an extension to Turkey, and a subsea pipeline from Lebanon to Cyprus. At present, though, it seems unlikely that extensions to Turkey or Cyprus will be built in the near term.

ELECTRICITY

Almost all electricity production in Jordan currently is carried out by the National Electric Power Company (NEPCO), a state-owned utility, and its subsidiaries. The Zarqa power plant, with a capacity of 400 megawatts (MW), and the Aqaba power plant, with a capacity of 650 MW, are the country's two main power generation facilities. Electricity demand is growing - around 3.5% in 2001 - and the Jordanian government has been seeking ways to attract foreign capital to fund additional capacity. In December 2001, the Jordanian government awarded a contract to Rothschild and Sons of Britain to provide advice on the privatization scheme. Jordan's basic plan for the future of its electric utility system involves having NEPCO maintain ownership of transmission assets, but relying on private power generation and privatizing existing generation assets. NEPCO's distribution subsidiary, the Electricity Distribution Company (EDCO), also is to be privatized. Two other private distribution firms already exist - the Jordan Electric Power Company (JEPCO) in the Amman area and the Irbid District Electricity Company (IDECO) covering the area around Irbid.

In May 2000, Jordan awarded its first contract for an independent power producer (IPP) to Tractebel of Belgium. The plant will have a capacity of 450 MW, and will be located near Amman. It is to be fuelled with natural gas from Egypt when it is completed in 2004.

An area of potential regional cooperation involves integration of individual national power transmission grids into a regional power network. Such a network would, among other benefits, allow power companies to take advantage of differences in peak demand periods, reduce the need for (and the costs associated with) installation and maintenance of reserve power generating capacity, and provide outlets for surplus generating capacity (mainly from Israel to Jordan).

The first step in this enterprise, the linking of the Egyptian and Jordanian power grids via an underwater cable between Aqaba and Taba (across the Gulf of Aqaba in Sinai), was completed in October 1998 and formally inaugurated in April 1999. Syria and Jordan also have linked their electric grids. Israel, for the time being, has been excluded from the grid linking projects, but has continued discussions with Jordan on the subject and may join the network once political hurdles related to the Arab-Israeli peace process have been overcome.

Sources for this report include: CIA World Factbook 2002; Dow Jones News Wire service; Economist Intelligence Unit ViewsWire; Global Insight Middle East Economic Outlook; Hart's Middle East Oil and Gas; Jordan Times; Middle East Economic Digest; Middle East Economic Survey; Oil and Gas Journal; Petroleum Economist; Petroleum Intelligence Weekly; U.S. Energy Information Administration.

COUNTRY OVERVIEW

Chief of State: King Abdallah bin Hussein
Prime Minister: Ali Abu Raghab
Independence: May 25, 1946 (from the United Kingdom)
Population (2002E): 5.3 million
Location/Size: Middle East, northwest of Saudi Arabia/89,213 sq. kilometers, slightly smaller than Indiana
Major Cities: Amman (capital), Irbid, Al'Aqabah, Ma'an
Languages: Arabic (official), English
Ethnic Groups: Arab (98%), Circassian (1%), Armenian (1%)
Religions: Sunni Muslim (96%), Christian (4%)
Defense (8/98): Army (90,000); Air Force (13,400); Navy (650); Reserves (35,000); Paramilitary Forces (30,000)

ECONOMIC OVERVIEW

Currency: Jordanian Dinar (JD)
Market Exchange Rate (3/18/03): US$1 = JD 0.71
Gross Domestic Product (GDP) (2002, market exchange rate): $9.5 billion
Real GDP Growth Rate (2002E): 4.9% **(2003F):** 3.5%
Consumer Price Inflation (2002E): 1.8% **(2003F):** 1.5%
Major Trading Partners: Iraq, USA, Germany, India, Italy, United Kingdom, Saudi Arabia
Merchandise Exports (2002E): $5.1 billion
Merchandise Imports (2002E): $6.1 billion
Merchandise Trade Balance (2002E): -$1.0 billion
Major Export Products: Chemicals; phosphates; potash; food; manufactures; textiles
Major Import Products: Food; machinery; chemicals; transport equipment; crude oil
Current Account Balance (2002E): -$10.0 million
Total External Debt (2002E): $8.9 billion
International Reserves (2002E): $4.1 billion

ENERGY OVERVIEW

Minister of Energy and Mineral Resources: Mr. Mohammad al-Bataineh
Proven Oil Reserves (1/1/03E): 890,000 barrels
Oil Production (2002E): 40 bbl/d
Oil Consumption/Net Imports (2002E): 106,000 bbl/d
Main Oil Import Source: Iraq
Crude Oil Refining Capacity (1/1/03E): 90,400 bbl/d
Natural Gas Reserves (1/1/03E): 230 billion cubic feet (Bcf)
Natural Gas Production/Consumption (2001E): 10 Bcf
Electric Generation Capacity (1/1/02E): 1.47 gigawatts (99.6% thermal; 0.4% hydro)
Electricity Generation (2001E): 7.1 billion kilowatthours

ENVIRONMENTAL OVERVIEW

Minister of Water & Irrigation: Hazim al-Nasir
Total Energy Consumption (2001E): 0.23 quadrillion Btu* (<0.1% of world total energy consumption)
Energy-Related Carbon Emissions (2001E): 4.3 million metric tons of carbon (<0.1% of world carbon emissions)
Per Capita Energy Consumption (2001E): 33.7 million Btu (vs U.S. value of 341.8 million Btu)
Per Capita Carbon Emissions (2001E): 0.63 metric tons of carbon (vs U.S. value of 5.5 metric tons of carbon)
Energy Intensity (2001E): 28,986 Btu/ $1995 (vs U.S. value of 11,014 Btu/ $1995)**
Carbon Intensity (2001E): 0.54 metric tons of carbon/thousand $1995 (vs U.S. value of 0.17 metric tons/thousand $1995)**
Fuel Share of Energy Consumption (2001E): Oil (94.0%), Natural Gas (4.6%), Coal (0.0%)
Fuel Share of Carbon Emissions (2001E): Oil (96.4%), Natural Gas (3.6%), Coal (0.0%)
Status in Climate Change Negotiations: Non-Annex I country under the United Nations Framework Convention on Climate Change (ratified November 12th, 1993). Not a signatory to the Kyoto Protocol.
Major Environmental Issues: Limited natural fresh water resources; deforestation; overgrazing; soil erosion; desertification.
Major International Environmental Agreements: A party to Conventions on Biodiversity, Climate Change, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Marine Dumping, Nuclear Test Ban, Ozone Layer Protection and Wetlands.

* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar, wind, wood and waste electric power. The renewable energy consumption statistic is based on International Energy Agency (IEA) data and includes hydropower, solar, wind, tide, geothermal, solid biomass and animal products, biomass gas and liquids, industrial and municipal wastes. Sectoral shares of energy consumption and carbon emissions are also based on IEA data.
**GDP based on EIA International Energy Annual 2001

ENERGY INDUSTRIES

Organization: - Natural Resources Authority (NRA) - state body responsible for overall direction of Jordan's energy resources; National Petroleum Company; Petra Drilling Company; Jordan Petroleum Refinery Co. - operates Jordan's single refinery at Zarqa, near Amman; National Electric Power Corporation (NEPCO)
Major Port: Aqaba
Major Oil and Gas Fields: Risha (natural gas)
Major Pipelines: Tapline - closed (Ras Tanura - Haifa)
Major Refineries (crude capacity): Zarqa (90,400 bbl/d)

LINKS

For more information from EIA on Jordan, please see:
EIA - Country Information on Jordan

Links to other U.S. government sites:
CIA World Factbook - Jordan
U.S. Department of Energy - Office of Fossil Energy - Jordan
U.S. State Department Consular Information Sheet - Jordan
U.S. State Department Country Commercial Guide - Jordan
U.S. Embassy in Jordan
Department of Commerce - International Trade Administration - Jordan

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Jordan's National Information Systems for information on government functions, organizations and official agencies
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File last modified: March 18, 2002

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